

Leveraging the Educational Outreach Efforts of Low-cost Missions

Diane K. Fisher and Nancy J. Leon
Jet Propulsion Laboratory, California Institute of Technology
Pasadena, California USA

Abstract

The U.S. National Aeronautics and Space Administration (NASA) strongly emphasizes the importance of public and educational outreach as an intrinsic part of every space mission. Not only is it necessary to gain and retain public support for space science missions, but also it is an explicit mandate that NASA make every effort to offer genuine and accessible value to the general public in exchange for its support. The product of value is, first of all, information. Of course part of this outreach effort includes industrial technology transfer and free access to raw data for study by science investigators. But an equally important part includes reaching out to the youngest members of our society, those who will soon be choosing their careers, paying taxes, voting, and helping to decide the direction that space exploration and other scientific research will—or will not—take in the coming decades.

NASA seeks to implement this commitment through each of its space missions. Thus, even the lowest-cost NASA missions include a small budget for public and educational outreach. But how can these missions best use this resource? This paper describes in some detail the approach taken by a small educational outreach team for NASA's New Millennium Program (NMP), including, among others, the missions Deep Space 1 (best known for its demonstration of ion propulsion) and Deep Space 2 (the Mars Microprobe mission, piggybacking on the Mars Polar Lander).

Children need personal attention. To feel involved and motivated, they need to be allowed to encounter and participate in the space program in their everyday lives. They need to have ideas broken into digestible, child-sized chunks and presented in a concrete way.

The outreach team's approach is twofold: develop a highly desirable suite of products designed to appeal to, as well as inform, children; then negotiate relationships with existing channels for dissemination of these products. This latter task is normally the most expensive part of outreach. The paper will describe in some detail both the products and the "marketing" approach for those products.